Construction Maximum Total Hourly Emission Rates

TAIL PIPE EMISSIONS ("EXHAUST")	NO_x		CO		PM_{10}		SO_2	
	(lb/hr)	(g/s) [1]	(lb/hr)	(g/s) [1]	(lb/hr)	(g/s) [1]	(lb/hr)	(g/s) [1]
Sitework (Earthwork and Civil) Equipment Construction Emissions								
Maximum Hourly	1.9	0.236	11.8	1.492	----	----	0.16	0.020
Maximum 3-Hour [2]	----	----	----	----	----	----	0.16	0.020
Maximum 8-Hour [2]	----	----	11.8	1.492	----	----	----	----
Maximum 24-Hour [3]	----	----	----	----	0.14	0.018	0.13	0.016
Annual [4]	0.50	0.063	----	----	0.05	0.0060	0.05	0.006
Erection Support Equipment Construction Emissions								
Maximum Hourly	25.1	3.164	24.0	3.028	----	----	2.49	0.314
Maximum 3-Hour [2]	----	----	----	----	----	----	2.49	0.314
Maximum 8-Hour [2]	----	----	24.0	3.028	----	----	----	----
Maximum 24-Hour [3]	----	----	----	----	1.44	0.181	2.08	0.262
Annual [4]	6.05	0.762	----	----	0.41	0.052	0.59	0.074
TOTAL EMISSIONS (used as model input)								
Maximum Hourly	27.0	3.399	35.9	4.520	----	----	2.7	0.334
Maximum 3-Hour [2]	----	----	----	----	----	----	2.7	0.334
Maximum 8-Hour [2]	----	----	35.9	4.520	----	----	----	----
Maximum 24-Hour [3]	----	----	----	----	1.6	0.199	2.2	0.278
Annual [4]	6.6	0.825	----	----	0.5	0.058	0.6	0.081

FUGITIVE DUST EMISSIONS (Onsite Construction)	PM_{10} (lb/hr)	PM_{10} (g/s) [1]
Construction Dust (PM_{10}) Emissions- Plant Site		
Maximum 24-Hour [5]	0.48	0.060
Construction Dust (PM_{10}) Emissions - Plant Site		
Annual [6]	0.17	0.021

[1] Grams per second (g/s) = lbs/hr * 0.126

[2] 3-hour Lbs/Hr and 8-hour Lbs/Hr = Maximum Lbs/Hr

[3] 24-hour lbs/hr = Maximum daily PM_{10} emissions (lb/day) divided by 24 hours.

[4] Annual Tail Pipe (Exhaust) Lbs/Hr = Annual emissions (TPY) * (2000 hrs/yr) * (1 yr/8760 hours).

[5] 24-hour fugitive dust emissions are based on 7.33 lbs/acre/day (0.11 ton/acre/month) (Midwest Research Institute 1996) PM_{10}, 20-hour workdays and 50% control efficiency.

[6] Annual fugitive dust emissions are based on 5 months disturbance, assume one half of the plant site disturbed at any given time, 6 days per week, 20-hour workdays and assume a 50% control efficiency.

Construction Activities Emission Rates - Model Input

TAIL PIPE EMISSIONS ("EXHAUST")	NO_x [5] (g/s)	CO [5] (g/s)	PM_{10} [5,6] (g/s)	SO_2 [5,6] (g/s)
Sitework (Earthwork and Civil) Equipment Construction Emissions				
Maximum Hourly	0.039	0.249	----	0.003
Maximum 3-Hour	----	----	----	0.003
Maximum 8-Hour	----	0.249	----	----
Maximum 24-Hour	----	----	0.003	0.003
Annual	0.011	----	0.001	0.001
Erection Support Equipment Construction Emissions				
Maximum Hourly	0.527	0.505	----	0.052
Maximum 3-Hour	----	----	----	0.052
Maximum 8-Hour	----	0.505	----	----
Maximum 24-Hour	----	----	0.030	0.044
Annual	0.127	----	0.009	0.012
TOTAL EMISSIONS (used as model input)				
Maximum Hourly	0.566	0.754	----	0.055
Maximum 3-Hour	----	----	----	0.055
Maximum 8-Hour	----	0.754	----	----
Maximum 24-Hour	----	----	0.033	0.047
Annual	0.138	----	0.010	0.013

FUGITIVE DUST EMISSIONS [2]	PM_{10} (g/s)
Construction Dust (PM10) Emissions- Plant Site	
Maximum 24-Hour	0.060
Construction Dust (PM10) Emissions - Plant Site	
Annual	0.021

[1] For modeling purposes, the tailpipe ("Exhaust") emissions were split evenly between six point sources.

[2] Fugitive dust PM_{10} emissions were modeled as a single volume source within the proposed plant construction site.